

Claim Status

Claims 1-16 are pending. Claims 1-16 stand rejected. Claims 1, 3, 6 and 9 are independent in form.

Claims 1-16 have been rejected under 35 U.S.C. §112, first paragraph, and under 35 U.S.C. §103.

Applicants herein amend independent claims 1, 3, 6 and 9.

Rejections under 35 U.S.C. § 112

Claims 1-16 have been rejected under 35 USC §112, first paragraph, for allegedly “containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.” This rejection was apparently precipitated by the previous amendment in which the language “regardless of a selecting operation by said zone selecting means” was added to the respective independent claims.

Applicants do not agree with the Examiner’s characterization that this language is contradictory to other limitations in the respective claims, because the operation of the invention is clearly understood by one skilled in the art with reference to the specification, for example, as relates to the first embodiment. (See page 26, line 4 to page 28, line 25, page 28.)

None-the-less, Applicants have reworded this language in the amended claims presented herein to clarify operation of the invention in this regard, i.e., that the control means control the exposure control to fix an exposure control state to an optimum exposure control state by using control parameters stored in memory “independently of the particular zone selected by the selection means”. Applicants submit that the amended claims overcome or otherwise render moot the rejections under §112 and Applicants respectfully request their withdrawal.

Rejections under 35 U.S.C. § 103

Claims 1-16 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the primary (previously cited) reference Mimura in view of the newly cited Stempeck (USP 3,945,025) and other previously cited references, specifically, as follows: claim 1 as being unpatentable over Mimura in view of Stempeck; claims 3-5 as being unpatentable over Mimura in view of Stempeck and Iwasaki; claims 6-8 as being unpatentable over Mimura in view of Stempeck and Iwasaki and further in view of Shimuzu; and claims 9-15 as being unpatentable over Mimura in view of Stempeck and Iwasaki and further in view of Faltermeier.

As stated in Applicants' previous response (Amendment filed March 15, 2001), the present invention, as recited for example in independent claim 1 regarding the image sensing apparatus having image sensing means (3), senses a subject image formed on an image sensing plane and outputs an image signal corresponding to the subject.

The invention recited in claim 1 is characterized as follows.

Initially, in a state that the image sensing means is sensing the subject image, a photographer selects any zone on the image sensing plane in which an optimum exposure control state of exposure is desired to be obtained by zone selecting means (21).

Exposure detection is performed automatically for detecting an exposure condition on the basis of an image signal in a selected zone selected by the zone selecting means.

An exposure control is performed automatically for controlling exposure based upon the detected exposure condition by the exposure control means (18e).

Memory means (18d) store control parameters of the exposure control means when an exposure control processing by the exposure control means is completed and an optimum exposure control state is obtained.

The control means automatically control, by using the control parameters stored in the memory means, the exposure control means to fix an exposure control state to the optimum exposure control state regardless of a selecting operation by the zone selecting means, i.e., “independently of the particular zone selected”.

In this fashion, only by the photographer's selection of a particular zone (subject) while the image sensing means is sensing the subject image, is the optimum exposure control state to the selected zone fixed appropriately. That is, the optimum exposure control state is locked to the selected zone even if the photographer's visual axis (line-of-sight) gets out of the selected zone because the control parameters are stored in the memory means.

Accordingly, the image sensing apparatus recited in claim 1 is enabled to more certainly perform optimum exposure control to the selected zone, even if it is difficult for the photographer to accurately discern the state of exposure of the subject by the EVF or the LCD.

Similar reasoning applies for independent claims 3, 6 and 9 which include similar features as claim 1.

The Examiner has apparently conceded, in view of the arguments previously presented (by the Mach 15, 2001 Amendment) that Mimura does not anticipate the claimed invention. (The claims were rejected as being anticipated by Mimura in the previous Office Action dated September 12, 2000.) The Examiner's position is now that Mimura does not teach control means for, regardless of a selecting operation by said zone selecting means (i.e., “independently of the particular zone selected”), controlling said exposure control means which

the Examiner interpreted to mean an automatic exposure override manual adjustment of exposure parameters. This, according to the Examiner, is allegedly taught, although in mechanical form, by Stempeck.

Applicants respectfully submit that the teachings of Stempeck are insufficient to provide to Mimura, the necessary teachings to arrive at the present invention as claimed. Applicants believe that the present invention is not obvious in light of the cited references because a *prima facie* case of obviousness has not been established.

To establish a *prima facie* case of obviousness, there must be motivation or suggestion either in the references themselves or in the general knowledge available to one of ordinary skill in the art to combine the references, and there also must be a reasonable expectation of success for the combination of references.

First, there is no motivation or suggestion to combine the references. Also, Applicants fail to see, given the disclosures of the respective references, even if motivation were to exist, how a system resulting from the combination of the references would be operable.

As previously explained, Mimura allows a user to select an area of an image that is to be *ignored* in setting or adjusting the lens and the exposure control in the present invention is performed on the basis of the image signal in the selected zone. The teaching of Mimura of masking and ignoring the selected area is in fact a teaching in direct contrast to the present invention where exposure is controlled based on the image in the selected area.

This clearly distinguishes the present invention from the primary reference Mimura, in that it would not be obvious to one of ordinary skill in the art to simply configure Mimura to function on the basis of the image signal in the selected zone, because significantly different technology is employed for the present invention and the primary reference Mimura.

The present invention is not simply a “manual override” as alleged by the Examiner. Since no other cited references teaches the division of an image into separate zones and controlling exposure based on a selected area, including Stempeck, the rejection combination fails to disclose the present invention.

Further, Stempeck is silent on selecting any zone on an image sensing plane in a state that image sensing means is sensing a subject image and performing exposure control processing so as to fix an exposure control state to an optimum exposure control state regardless of a selecting operation by said zone selecting means. Thus, Stempeck does not disclose, teach or suggest the claimed features of the present invention.

Similarly, independent claims 3, 6 and 9 are believed to be patentably distinct from the references of record taken alone or in combination.

CONCLUSION

Accordingly, Applicants believe that independent claims 1, 3, 6 and 9 are allowable over the cited art as they each recite at least the foregoing mentioned features which are not taught nor suggested by the cited art, taken alone or in combination, and are thus in condition for allowance.

Furthermore, as claims 2, 4-5, 7-8, and 10-16 are dependent upon claims 1, 3, 6, and 9, Applicants submit that the dependent claims are likewise allowable for at least similar reasons. Applicants however reserve the right to address the individual rejection of the dependent claims in the future should the need arise.

In the event that a telephone conference would facilitate prosecution of the instant application in any way, the Examiner is invited to contact the undersigned at the number provided.

An early and favorable examination on the merits is respectfully requested.

AUTHORIZATION

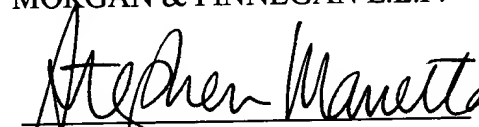
The Commissioner is hereby authorized to charge any additional fees which may be required for this amendment, or credit any overpayment to Deposit Account No. 13-4500, Order No. 1232-4252US2.

Respectfully submitted,

MORGAN & FINNEGAN L.L.P.

Dated: December 5, 2001

By:


Stephen J. Manetta
Registration No. 40,426

Mailing Address:

MORGAN & FINNEGAN L.L.P.
345 Park Avenue
New York, New York 10154
(212) 758-4800 (Telephone)
(212) 751-6849 (Facsimile)

APPENDIX**VERSION WITH MARKINGS TO SHOW AMENDMENTS
TO INDEPENDENT CLAIMS 1, 3, 6 AND 9**

Claims 1, 3, 6 and 9 have been amended as follows:

1. (Five times amended) An image sensing apparatus having image sensing means for sensing a subject image formed on an image sensing plane and outputting an image signal corresponding to the subject image, comprising:

zone selecting means for selecting any zone on the image sensing plane in a state that said image sensing means is sensing the subject image;

exposure detection means for detecting an exposure condition on the basis of an image signal in a selected zone;

exposure control means for controlling exposure based upon the detected exposure condition;

memory means for storing control parameters outputted by said exposure control means, the memory means configured to store the control parameters when an exposure control processing by said exposure control means is completed and an optimum exposure control state is obtained; and

control means for, [regardless of a selecting operation] independently of the particular zone selected by said zone selecting means, controlling said exposure control means to fix an exposure control state to the optimum exposure control state by using the control parameters stored in said memory means.

3. (Five times amended) An image sensing apparatus having image sensing means for sensing a subject image formed on an image sensing plane and outputting an image signal corresponding to the subject image, comprising:

APPENDIX

zone selecting means for selecting any zone on the image sensing plane in a state that said image sensing means is sensing the subject image;

exposure detection means for detecting an exposure condition on the basis of the image signal in a selected zone;

exposure control means for controlling an exposure based upon the detected exposure condition;

memory means for storing control parameters outputted by said exposure control means, the memory means configured to store the control parameters when an exposure control processing by said exposure control means is completed and an optimum exposure control state is obtained;

control means for, [regardless of a selecting operation] independently of the particular zone selected by said zone selecting means, controlling said exposure control means to fix an exposure control state to the optimum exposure control state by using the control parameters stored in said memory means; and

selected-zone detection means for determining whether the image signal captured by said image sensing means contains said zone upon elapse of a prescribed period of time, and outputting a signal for resetting control parameters in said memory means if the captured image signal is not contained in said zone.

6. (Five times amended) An image sensing apparatus having image sensing means for sensing a subject image formed on an image sensing plane and outputting an image signal corresponding to the subject image, comprising:

zone selecting means for selecting any zone on the image sensing plane in a state that said image sensing means is sensing the subject image;

APPENDIX

exposure detection means for detecting an exposure condition relating to the image signal in a selected zone on the basis of the image signal;

exposure control means for controlling an exposure based upon the detected exposure condition;

first memory means for storing control parameters outputted by said exposure control means, the memory means configured to store the control parameters when an exposure control processing by said exposure control means is completed and an optimum exposure control state is obtained;

control means for, [regardless of a selecting operation] independently of the particular zone selected by said zone selecting means, controlling said exposure control means to fix an exposure control state to the optimum exposure control state by using the control parameters stored in said first memory means;

second memory means for storing a video signal of said zone; and

detection means for determining whether a zoomed image signal captured by said image sensing means contains the video signal of said zone stored in said second memory means, and outputting a signal for resetting the control parameters in said first memory means if the captured image signal is not contained in said zone.

9. (Five times amended) An image sensing apparatus having display means for displaying an image signal, comprising:

a pointing device for selecting any zone in a screen displayed by said display means in a state that said image sensing means is sensing the subject image;

adjusting means for applying a prescribed adjustment to the image signal of said zone;

APPENDIX

memory means for storing adjusting data outputted by said adjusting means; and
control means for storing the adjusting data in said memory means, the memory means configured to store the adjusting data when adjustment by said adjusting means is completed and a prescribed state is obtained, and for controlling said adjusting means to fix an exposure control state to the prescribed state by using the adjusting data stored in said memory means[, regardless of a selecting operation] independently of the particular zone selected by said zone selecting means.